

TWO NEW VARIETIES OF EARLY SPRING PLANTS—A  
RANUNCULUS FROM MISSOURI AND A HETEROTHECA  
FROM TEXAS

H. C. BENKE.

FOR a number of years the writer has been interested in the calendar of the earliest spring flora, more especially that of a zone across the country from Green Bay, Wisconsin, on the north to the Gulf Coast of Texas about Galveston. The past season a trip was made from Galveston to Chicago with many stop-overs, proceeding northward as the earliest flora would warrant when specimens of interest were taken with many field notes.

Two of the specimens secured do not agree exactly with any described hitherto so it seems necessary to propose new names for them.

The species *RANUNCULUS HARVEYI* (Gray) Britton was obtained as far north and west as Rolla, Phelps County, Missouri but plants collected there were found to differ from the typical form particularly in their pronounced hairiness. Upon looking over the specimens on file in the herbarium of the Field Museum, Chicago there were found but two true collections of this species of buttercup: near St. Louis, Mo., *H. Eggert* and Allentown, Mo., *Lettermann*—others so named were errors in determination. Both are from St. Louis County and probably present the extreme northeastern limit of the species' range. As there is no specimen in the Illinois Herbarium of the Field Museum the plant has, perhaps, not crossed the Mississippi River. Both these specimens agree well with the original descriptions—sparsely pubescent (Gray) or glabrous (Britton)—that is, nearly or quite glabrous and the achenes beaked very much like those of *R. abortivus* L.

But the specimens from Rolla are very strongly pilose even as to most of the leaves and the axils of the upper ones. There is also more or less pubescence on the sepals. And the achene-beaks are plainly recurved rather than "straight or straightish" as are those of *R. Harveyi*. Therefore I am proposing for this pubescent plant the name

*RANUNCULUS HARVEYI* (Gray) Britton, var. **pilosus**, var. nov., ubique plus minusve pilosis imprimis petiolis caulibusque; foliis sepalisque etiam mediocriter pilosis vel subglabris; stylo aliquid brevi recurvato.

With the species as to roots, leaf-forms, inflorescence and petals but

strongly pilose with long soft hairs (1-2 mm. long) especially on lower stems, petioles and axils of upper leaves. Leaves sparsely to densely hairy especially on upper surface and sepals more or less so. Styles recurved, almost from the first, mostly very much so but varying in this character and quite resembling those of *R. alleghaniensis* Britton, in cases.—The TYPE is from Rolla, Mo., April 18, 1928, *H. C. Benke* 4575 in Field Museum.

HETEROTHECA was found to be quite common about Galveston, Texas, where it formed strikingly beautiful patches in the landscape. The specimens noted were branched at the base, decumbent or strongly ascending in habit, and their leaf-form, as noted on closer inspection later, was most unusual. The casual aspect of the plant in the field reminded one of *Chrysopsis* species.

Specimens of *Heterotheca* in the Field Museum as well as literature on the subject indicate this to be a difficult genus, the species not being sharply defined but the larger number on file can be referred to *H. subaxillaris* (Lam.) Britton & Rusby. My specimens under consideration being conspicuously differentiated (even by aspect in the field), a variety to include them is, therefore, named and described as follows:

HETEROTHECA SUBAXILLARIS (Lam.) Britton & Rusby, var. **petiolaris**, var. nov., *H. subaxillari* peraffinis; caulibus plus minusve adscendentibus; foliis plerumque petiolatis solum supremis sessilibus; basi petiolorum haud vel vix dilatata; pedicellis parce glandulosis.

With the species, lower and mostly decumbent, subdecumbent or ascending. Leaves nearly all petioled—except those in and near the inflorescence; petioles obscurely or not at all dilated at base—the few sessile leaves not clasping, at most slightly winged. Pedicels but sparingly provided with short glands.—The TYPE is from Galveston, Texas, March 12, 1928, *H. C. Benke* 4585 in Field Museum.

A plant from Houston, Texas, March 16, 1872, *E. Hall* 312 is exactly of the same description; so is another from Belknap, Texas, March 30, 1858, *Sutton Hayes* 399 but this latter is a weak plant and nearly strict in its growth.

In the Field Museum are two further specimens which though somewhat similar do not quite agree with the type. They are subdecumbent in habit but the petioles are auricled or winged at base and more of the upper cauline leaves are sessile—even clasping—which would classify them with the species rather than with the variety. They are: Huntsville, Texas, June 3-12, 1908, *Royal A. Dixon* 71 and Riverside, Texas, June 19, 1908, by the same collector, being his number 217.

CHICAGO, ILLINOIS.